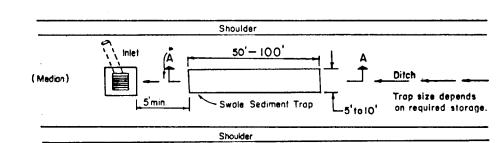


#### SWALE SEDIMENT TRAP



CONSTRUCTION SPECIFICATION FOR ST-IV

# To Remain Stabilized Or Covered With A 6" Lining Of 2" Stone

### 1. The swale sediment trap shall be constructed in accordance with the dimensions provided on the design drawings or sized to provide the

- minimum storage necessary 1800 cubic feet of storage for each acre of drainage area. Sediment shall be removed and trap restored to its original dimensions when the sediment has accumulated to 1/2 the design depth of the trap.
- 3. The structure shall be inspected after each rain and repairs made as:
- 4. Construction operations shall be carried out in such a manner that erosion and water pollution shall be minimized.
- 5. The sediment trap shall be removed and area stabilized when the contributory drainage area has been properly stabilized.

manner that it will not erode.

6. The swale sediment trap will be properly backfilled and the swale or ditch reconstructed.

SEDIMENT TRAP SCHEDULE										
TRAP NO.	TYPE OF TRAP	DRAINAGE AKEA DIGTURB.	STORAGE REO'D (1800XAC)	STORAGE PROV'D. (CFS)	TIRAIP BIZE WXL	STOKAGE DEPTH	130770M ELEV.			
/	ELVALE 51-IV	0.24	432 CF	4500F	5 x 45	2'	779).0			
2	SINALE 67-IV	0.17	306 C	320CF	8×20	2'	764.0			
ع	SWALE ST.IV	0.26	468 CF	500 CF	5.50	2'	739.5			

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

And Zoning Administration

of the Nelm

SOIL CONSERVATION SERVICE

SOIL CONSERVATION DISTRICT

REQUIREMENTS.

REVIEWED FOR HOWARD S.C.D. AND MEETS TECHNICAL

THIS DEVELOPMENT IS APPROVED SOIL EROSION AND

SED MENT CONTROL BY THE HOWARD SOIL CONSERVATION

11.24-87

Removed sediment shall be deposited in a suitable area and in such a

Maximum Drainage Area: 2 Acres

## PERMANENT SEEDING NOTES

Apply to graded or cleared areas not subject to immediate further disturbance where a permanent long-lived vegetative cover is needed.

Seedbed Preparation: Loosen upper three inches of soil by raking, discing or other Soil Amendments: In lieu of soil test recommendations, use one of the following schedules 1) Preferred - Apply 2 tons per acre dolomitic limestone (92 lbs/1000 square ft) and 600 lbs per acre 10-10-10 fertilizer (14 lbs/1000 sq ft) before seeding. Harrow or disc into upper three inches of soil. At time of seeding, apply 400 lbs

per acre 30-0-0 ureaform fertilizer (9 lbs/1000 sq ft). 2) Acceptable - Apply 2 tons per acre dolomitic limestone (92 lbs/1000 sq ft) and 1000 lbs per acre 10-10-10 fertilizer (23 lbs/1000 sq ft) before seeding. Harrow or disc into upper three inches of soil.

Seeding - For the periods March 1 thru April 30, and August 1 thru October 15, seed with 60 lbs per acre (1.4 lbs/1000 sq ft) of Kentucky 31 Tall Fescue. For the period May 1 thre July 31, seed with 60 lbs Kentucky 31 Tall Fescue per acre and 2 lbs per acre (.05 lbs/1000 sq ft) of weeping lovegrass. During the period of October 16 thru February 28, protect site by: Option (1) 2 tons per acre of well anchored straw mulch and seed as soon as possible in the apring. Option (2) Use sod. Option (3) Seed with 60 lbs/

acre Kentucky 31 Tall Fescue and mulch with 2 tons/acre well anchored straw. Mulching - Apply 14 to 2 tons per acre (70 to 90 lbs/1000 sq ft) of unrotted small grain straw immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 218 gallons per acre (5 gal/1000 sq ft) of emulsified asphalt

on flat areas. On slopes 8 feet or higher, use 348 gallons per acre (8 gal/1000 sq ft) Matinenance - Inspect all seeded areas and make needed repairs, replacements and

## TEMPORARY SEEDING NOTES

Apply to graded or cleared areas likely to be redisturbed where a short-term vegetative

Seedbed Preparation: Loosen upper three inches of soil by raking, discing or other

Soil Amendments: Apply 600 lbs per acre 10-10-10 fertilizer (14 lbs/1000 sq ft) Seeding: For periods March 1 thru April 30 and from August 15 thru November 15, seed with 24 bushel per acre of annual rye (3.2 lbs/1000 sq ft). For the period May 1 thru August 14, seed with 3 lbs per acre of weeping lovegrass (.07 lbs/1000 sq ft). For ther period November 16 thru February 28, protect site by applying 2 tons per acre of

well anchored straw mulch and seed as soon as possible in the spring, or use sod.

CONTROL for rate and methods not covered.

Mulching: Apply 14 to 2 tons per acre 670 to 90 lbs/1000 sq ft) of unrotted small grain straw immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 218 gal per acre (5 gal/1000 sq ft) of emulsified asphalt on flat areas. On slopes, 8 ft.or\_higher, use 348 gel per acre (8 gel/1000 sq ft) for anchoring. Refer to the 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT

- SEDIMENT CONTROL NOTES A minimum of 24 hours notice must be given to the Howard County Office of Inspection and Permits prior to the start of any construction.
- 2) All vegetative and structural practices are to be installed according to the provisions of this plan and are to be in conformance with the 1983 MAKYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL.
- 3) Following initial soil disturbance or redisturbance, permanent or temporary stabilization shall be completed within: a) 7 calendar days for all perimeter sediment control structures, dikes, perimeter slopes and all slopes greater than 3:1. 14 days as to all other disturbed or grades areas on the project site.
- 4) All sediment traps/basins shown must be fenced and All sediment traps/basins snown must be renew and warning signs posted around their perimeter in accordance with Vol. 1, Chapter 12, of the HOWARD COUNTY DESIGN MANUAL, Storm Drainage.
- 5) All disturbed areas must be stabilized within the time period specified above in accordance with the 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL for permanent seedings (Sec. 51) sod (Sec. 54), temporary seeding (Sec. 50) and mulching (Sec. 52.) Temporary stabilization with mulch alone can only be done when recommended seeding dates do not allow for proper germination and establishment of grasses.
- 6) All sediment control structures are to remain in-place and are to be maintained in operative condition until permission for their removal has been obtained from the Howard County Sediment
- 7) Site Analysis: e Analysis:
  Total Area of Site
  Area Disturbed
  Area to be roofed or paved
  Area to be vegetatively stabilized
  Total Cut
  Total Fill

  34.382 Acres
  C.B59 Acres
  C.15 Acres
  Cu.748.
  Cu.748. Total Area of Site
  Area Disturbed Offsite waste/borrow area location
- 8) Any sediment control practice which is disturbed by grading activity for placement of utilities must be
- 9) Additional sediment controls must be provided, if
- 10) On all sites with disturbed areas in excess of 2 acres, approval of the inspection agency shall be requested upon completion of installation of perimeter erosion and sediment controls, but before proceeding with any other earth disturbance of grading. Other building or grading inspection approvals may not be authorized until this initial approval by the inspection agency is made.

FULL DEPTH BIT, CONC. ALTERNATE

- I" BIT. CONC. SURFACE

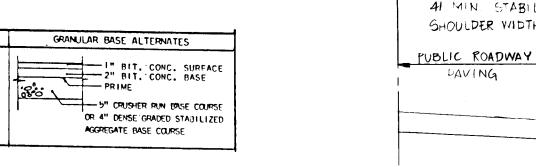
4" BIT. CONC. BASE

4 ROAD 41 MIN. STABILIZED

- HOLD NORMAL SHOULDER

ELEVATION AT THIS POINT

IWEEK



PAVING SECTION 'P-1'

GRANULAR BASE ALTERNATES

I" BIT. CONC. SURFACE
2" BIT. CONC. BASE
PRIME

OR 4" DENSE GRADED STABILIZED AGGREGATE BASE COURSE

# NORMAL DITCH GRADING DRIVEWAY GRADING DETAIL

NOT TO SCALE

COVER

I. DRIVEWAY MUST BE PAVED FROM EDGE OF BUBLIC ROAD TO RIGHT OF WAY LINE USING STANDARD PAVING SECTION P-1.

SEQUENCE OF CONSTRUCTION

PRIOR TO BEGINNING CONSTRUCTION.

STABILIZE ALL DISTURBED AREAS.

2. NOTIFY IMISS UTILITY @ 559-0100 48 HOURS

BUREAU OF LICENCE, INSPECTIONS AND PERMITS

AND THE CONSTRUCTION INSPECTION / SURVEYS

DIVISION @ (301) 792-7272 AT LEAST' 24 HOURS

3. ROUGH GRAVE DITCH, INSTALL SWALE SEDIMENTTRAPS

PAVEMENT, CONSTRUCT 4' STRIP OF NEW

5. FINE GRADE SHOULDER, & DITCH AND VEGETATIVELY

G. WITH THE GRADING INSPECTOR'S APPROVAL REMOVE SHE SEDMENT TRAPS & STABILIZE ANY REMAINING

4, SAW CUT & REMOVE 3' STRIP OF EXISTING

PRIOR TO BEGINNING. NOTIFY THE HOWARD CO.

1. OBTAIN GRADING PERMIT.

INSTALL EXENEWAY CURVERTS

DISTURBED AREAS.

SHOULDER WIDTH

DAVING

# GENERAL NOTES

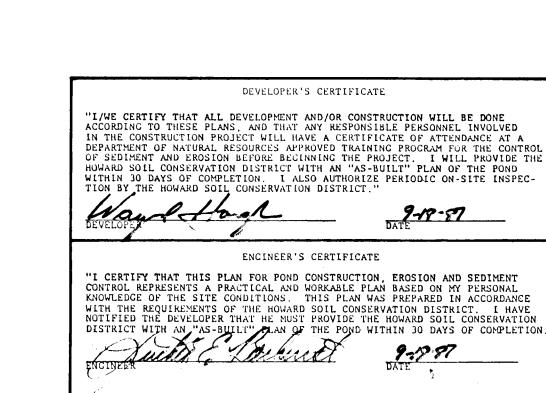
PRIVATE DRIVEWAY GRADE VARIES

(RECOMMENDED MAX. GRADE 18%)

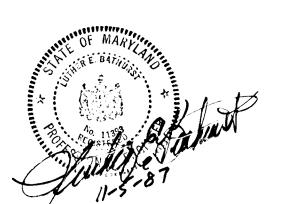
- 1. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE HOWARD COUNTY DESIGN MANUAL, VOL. IV, 1.e., STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION. 2. APPROXIMATE LOCATION OF EXISTING UTILITIES ARE SHOWN. THE CONTRACTER SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT THE EXISTING UTILITIES AND MAINTAIN UNINTERUPTED SERVICE. ANY DAMAGE INCURRED DUE TO CONTRACTOR'S OPERATION SHALL BE REPAIRED IMMEDIATELY AT THE CONTRACTOR'S EXPENSE. 3. THE CONTRACTOR SHALL TEST PIT FOR EXISTING UTILITIES AT LEAST FIVE (5) DAYS PRIOR TO STARTING WORK SHOWN ON THESE DRAWINGS. 4. CONTRACTOR SHALL NOTIFY THE FOLLOWING UTILITIES AT LEAST FIVE (5) DAY PRIOR TO BEGINNING WORK SHOWN ON THESE DRAWINGS. BALTIMORE GAS & ELECTRIC COMPANY......539-8000 HOWARD COUNTY BUREAU OF UTILITIES.....992-2366 HOWARD COUNTY CONSTRUCTION/INSPECTION
- SURVEY DIVISION (24 HOURS NOTICE PRIOR OF COMMENCEMENT OF WORK)......792-7272 7. STORM DRAIN TRENCHES WITHIN ROAD RIGHTS-OF-WAY SHALL BE BACKFILLED AND COMPACTED IN ACCORDANCE WITH HOWARD COUNTY DESIGN MANUAL, VOL. IV, 1.e., STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION. 8. INSTALLATION OF TRAFFIC CONTROL DEVICES, MARKING, AND SIGNING SHALL BE IN ACCORDANCE WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, 1978
- 9. PIPE SHALL NOT BE INSTALLED BY CONTRACTOR UNTIL THE LENGTH CALLED FOR AT EACH STATION HAS BEEN APPROVED BY THE ENGINEER IN THE FIELD. 10. DESIGNED TRAFFIC SPEED IN ACCORDANCE WITH THE AMERICAN ASSOCIATION OF STATE HIGHWAY OFFICIAL STANDARDS.
- HARDY ROAD 50 R/W (LOCAL ROAD), DESIGN SPEED = 30 MPH. 11. ALL ELEVATIONS SHOWN ARE BASED ON U.S.C. AND G.S. MEAN SEA LEVEL DATUM, 1929. 12. ALL FILL AREAS WITHIN ROADWAYS AND/OR UNDER STRUCTURES TO BE COMPACTED TO
- A MINIMUM 95% COMPACTION.

  13. ALL PIPE ELEVATIONS SHOWN ARE INVERT

  ELEVATIONS. A MINIHUM 95% COMPACTION.
- 14. PROFILE STATIONS SHALL BE ADJUSTED AS NECESSARY TO CONFORM TO PLAN
- 15. SUBJECT PROPERTY ZONED R PER 08-02-85 COMPREHENSIVE ZONING PLAN. 16. TOPO SHOWN HEREON WAS FIELD RUN BY BOENDER ASSOCIATES ON: MAY 1987. 17. NO PIPE SHALL BE LAID IN PLACE UNTIL LINES OF EXCAVATION HAVE BEEN
- BROUGHT TO WITHIN SIX (6) INCHES OF FINISHED GRADE ELEVATIONS. 18. ALL STORM DRAIN PIPE BEDDING SHALL BE CLASS "B" AS SHOWN IN FIG. 11.4 OF THE HOWARD COUNTY DESIGN MANUAL, VOL. I, UNLESS OTHERWISE NOTED.



DESCRIPTION REVISIONS





TITLE: D	ETAIL	_S		•	
PROJECT:	AURA	ND LC	)TS	1-8	
LOCATION:		TAR 391			CO.
SCALE:	DESIGNED BY:	DRAWN BY:	CHECKED BY:		DATE:
FIELD BOOK:	PAGE NO.:	JOB NO.: 86.42	•		VING NO.

boender associates consulting engineers land surveyors land planners

> COURTHOUSE SQUARE 3565 ELLICOTT MILLS DRIVE ELLICOTT CITY, MD. 21043

> > |301| 465-7777

AS-BUILT 11-28-88

